

NOTEBOOKS

FAQ

Q What is the Windows Sideshow display and how can it be used?

A One of the more visible innovations of Windows Vista is Windows Sideshow. This allows a Windows Vista PC to include a secondary display that can show information such as battery power or the time. Asus's W5FE is the first notebook to have a Sideshow display, which consists of a 4.8in display plus a joystick and buttons to navigate through your content.

Sideshow has its own processor and memory, so it can be used without turning on your notebook. It can be set periodically to wake up the notebook, update information such as emails received, and then shut it down again. This way you get regularly updated information without having to boot up Windows.

The system works by accessing information from gadgets on your sidebar. As more gadgets are developed you'll be able to access almost any information you want through Sideshow.

Seth Barton

Notebooks and video expert

seth@computersshopper.co.uk



APPLE MacBook

★★★★★

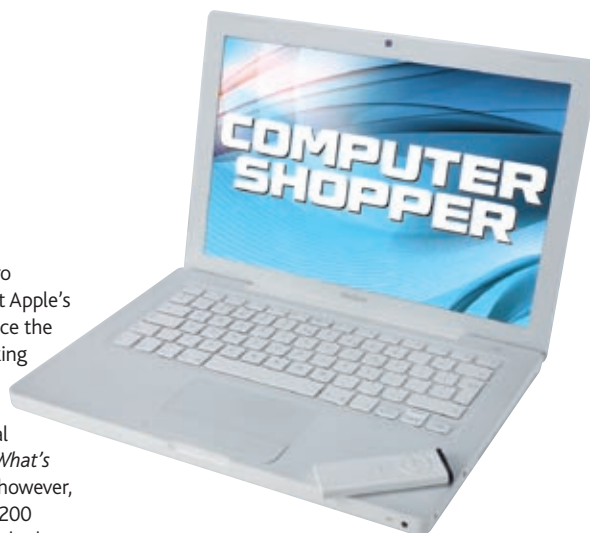
£879 inc VAT

With all the attention that Windows Vista's Aero desktop has generated, we shouldn't forget that Apple's computers have been running a 3D desktop since the release of OS X in 2001. Not content with looking good onscreen, the MacBook is also delightful to behold from pretty much any angle.

This new version of the MacBook is identical on the outside to the first one we reviewed in *What's New: Notebooks, Shopper* August 2006. Inside, however, it has been upgraded to an Intel Core 2 Duo T7200 processor, which runs at a speedy 2.0GHz. There's also 1GB of RAM so you'll be able to run memory-intensive tasks such as video editing and photo manipulation with no trouble. It's a respectable specification for the price, but similar Windows notebooks are generally cheaper. We installed Windows on the MacBook so we could run our benchmarks. These showed it to have comparable performance to an identically specified Windows notebook.

The hard disk is a reasonably big 80GB, and a stylish slot-loading DVD writer is fitted. There are only two USB2 ports, so you'll need a USB hub if you want to plug in anything more than a mouse and an MP3 player. There's no standard D-sub or DVI video output; instead, there's a Mini-DVI port. So if you want to plug in a standard monitor or projector, you'll need to buy an adaptor for £15. There is no memory card reader and no built-in modem, either. However, Bluetooth is included as standard.

The 13.3in screen is a great compromise in size between ultra-portable and regular notebook screens. It has the same level of quality as the best Windows



notebooks. The backlighting is consistent across the screen and it's capable of displaying a clean and bright white. There was some banding in our greyscale test, but our colour test looked vibrant. The 1,280x800 native resolution is sufficient for all but the most complex applications, although content can look a little cramped due to the screen's small size. Above the screen is a webcam for video chat sessions.

The keyboard has an unusual design with gaps between the individual keys, but it works well once you get used to the spacing. The only problem is the small Return key, which we missed repeatedly when typing. However, the touch pad is one of the biggest we've ever seen, and very accurate.

This updated MacBook can't compete with the best similarly priced Windows rivals in terms of specifications or number of ports. However, its minimalist styling still makes it an appealing alternative. It will be interesting to see if the launch of Windows Vista motivates Windows notebook designers to create something equally stunning.

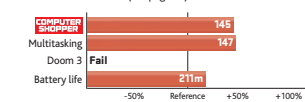
Seth Barton

SUMMARY

- ✓ Stylish chassis
- ✓ Great display
- ✗ Lacks many standard ports

NOTEBOOK 2.0GHz Intel Core 2 Duo T7200, 1GB RAM, 80GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL drive, 13.3in LCD screen, 2.4kg
PART CODE MA700B/A
SUPPLIER www.apple.com/ukstore
DETAILS www.apple.com/uk

PERFORMANCE (see page 56)



Also consider...

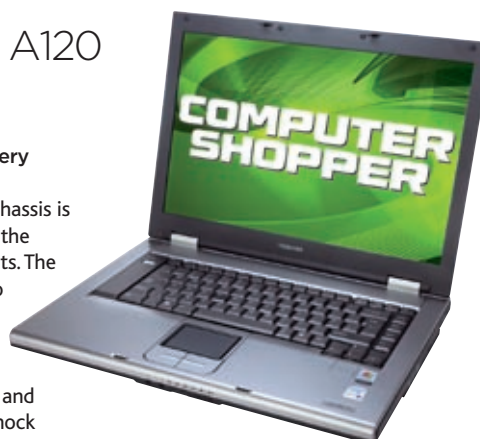
TOSHIBA Satellite Pro A120 SE-163

★★★★★

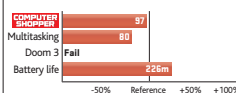
£605 inc VAT and delivery

The Satellite Pro A120's chassis is cleverly designed to help the notebook survive accidents. The motherboard is shaped to keep it away from the usually vulnerable chassis corners, there's a spill-resistant keyboard and the 60GB hard disk has shock protection to help protect your valuable data. Windows XP Professional Edition is installed for business users.

All this makes it well suited for use on the move. It's not the smallest notebook due to its 15.4in widescreen display, but the screen does have an anti-glare finish so it can be used in any conditions. There are plenty of USB2 ports and a memory card



NOTEBOOK 1.6GHz Intel Core Duo T2050, 512MB RAM, 60GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD
SUPPLIER www.dabs.com
DETAILS www.toshiba.co.uk
PART CODE PSAC1E-04V00VEN
✓ Designed to survive accidents; good keyboard and touch pad
✗ Needs more RAM
FULL REVIEW Mar 2007



reader as well. Inside, the dual-core processor and 512MB of RAM are easily enough to manage day-to-day office tasks.

There are better budget notebooks than this for multimedia purposes. However, if you need a reliable and tough travelling companion, the A120 certainly won't disappoint.

PANASONIC Toughbook CF-W5

★★

£1,680 inc VAT

Most notebooks never encounter an environment more hostile than an office desk, but some jobs require you to carry your notebook to more demanding locations, such as building sites or the great outdoors. Usually for these conditions, you'd choose a ruggedised notebook, but all that protection adds a lot of weight. Panasonic's Toughbook CF-W5 is described as a lighter, 'semi-ruggedised' alternative.

What this means in practice is an ultra-portable notebook with a metal case. The exterior of the chassis is made of a magnesium alloy that is supposed to protect the internal components better. Another advantage is the excellent thermal properties of the chassis; there are no air vents on the notebook. This helps protect it against dust and other contaminants.

The whole notebook, including the battery, weighs just 1.2kg. It's also very small and slender, so it will easily slip into a normal briefcase. Battery life is an impressive six-and-a-half hours, giving you nearly a whole working day away from the mains.

The 12.1in LCD is the first non-widescreen notebook display we've seen in a while. The native resolution is just 1,024x768 pixels, which is enough for office applications. It uses an anti-glare rather than gloss coating, so you'll be able to use it outdoors on sunny days. Unfortunately, it suffers from poor vertical viewing angles, so we constantly had to adjust the angle of the screen. The backlight is rather uneven, too, and the finish is a little grainy. It's not a great display, and we think even office users deserve better.

The keyboard looks cramped. The sizing of the keys is unusual, with small keys down the left-hand



side, and the Return key and spacebar are too small for our liking. The keys also don't have much travel. The touch pad is small and an unusual circular shape. It doesn't match the rectangular display and our fingers regularly hit the edge of the touch pad before the cursor reached the corners of the desktop. It is accurate, however, and the buttons below work fine.

The optical drive is accessed by flipping up a door beside the touch pad. This positioning of the drive limits the depth of the keyboard. We were impressed that such a small notebook even included a built-in

drive, though. There are all the ports you'd expect on a notebook, though only two USB2 ports are provided.

An Intel Core Solo Ultra Low Voltage (ULV) U1400 processor helps maximise battery life. It's not that quick, but it was fast enough for day-to-day tasks such as email and office applications. The 60GB hard disk has shock protection to keep data safe.

Sadly, we don't feel the CF-W5 is ideal. The price is very high, and we would rather have seen a notebook with a better keyboard and touch pad, even if that meant having a separate optical drive.

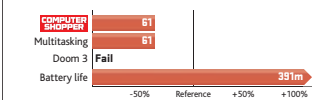
Seth Barton

SUMMARY

- ✓ Great battery life
- ✗ Very expensive
- ✗ Poor keyboard and touch pad

NOTEBOOK 1.2GHz Intel Core Solo ULV U1400, 512MB RAM, 60GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL drive, 12.1in LCD screen, 1.2kg
PART CODE CF-W5
SUPPLIER Centerprise 01256 378168
DETAILS www.toughbook-europe.com

PERFORMANCE (see page 56)



PC NEXTDAY Zoostorm 55-7701

★★★★★

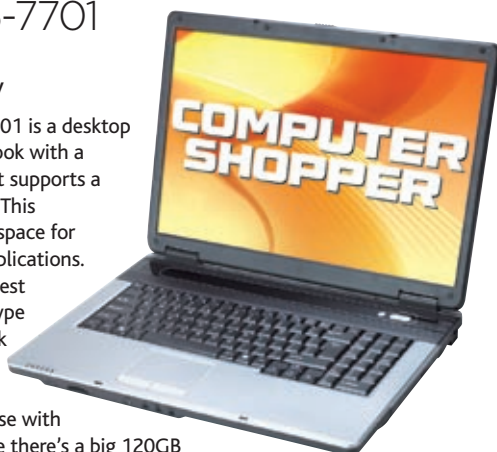
£919 inc VAT and delivery



PC Nextday's 55-7701 is a desktop replacement notebook with a big 17in display that supports a 1,440x900 pixel resolution. This provides plenty of desktop space for complicated or multiple applications.

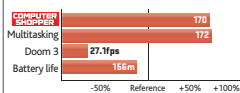
The keyboard isn't the best we've used, so those who type long documents should look elsewhere. The touch pad is accurate, but most users will probably opt for a mouse with this kind of notebook. Inside there's a big 120GB hard disk, which provides lots of storage for large media files.

The Intel Core 2 Duo processor and 1GB of RAM helped the Zoostorm to a fantastic 170 in the *Shopper* application benchmarks. With a dedicated 3D graphics chipset, it managed a playable 27.1fps in Doom 3.



NOTEBOOK 2.16GHz Intel Core 2 Duo T7400 processor, 1GB RAM, 120GB hard disk, ATI Mobility Radeon X1600 graphics, DVD+/-RW +/-DL, 17in widescreen LCD
SUPPLIER sales@pcnextday.co.uk
DETAILS www.pcnextday.co.uk
PART CODE 3355-7701

✓ Powerful in Windows; TV tuner
✗ Average keyboard and battery
FULL REVIEW Jan 2007



Big notebooks aren't designed for everyday mobile use, and the Zoostorm's battery lasted only two-and-a-half hours in our test. However, if you need a powerful notebook for home use that won't cost the earth, this is ideal.

BYTE SIZE

TRUST PW-4060T

★★★

£33 inc VAT



Without a battery backup, a power cut will switch off your PC. Even a temporary reduction in the mains voltage may cause a crash or a reset. Trust's PW-4060T is an Uninterruptible Power Supply (UPS) that protects a desktop PC from either eventuality.

There's no management software, but the UPS beeps when mains power is lost, becoming more insistent. It powered a typical desktop PC and 19in LCD monitor for 16 minutes, giving plenty of time to save work and shut down. There's surge protection for one phone line and one mains device, plus two battery-protected mains sockets.

This is a cheap UPS but we recommend you spend £10 more for a model that shuts down your PC in your absence.

Simon Handby

SUPPLIER www.amazon.co.uk
DETAILS www.trust.com

COOLER MASTER NotePal 5

★★★★★

£20 inc VAT



Cooler Master's NotePal 5 stands your notebook at a comfortable angle so you can use its screen as your main display when at a desk and still connect a keyboard and mouse. You can lock the NotePal 5 at different angles, but the stand has the notebook rest on its front edge. If your computer has media buttons, the weight of the notebook could push them in.

The stand has air holes, so your notebook shouldn't overheat. The whole thing folds flat, so you can pack it up and take it with you. It's not as flexible as Port's ErgoStation, but the NotePal 5 is £40 cheaper and a good way to use your notebook at a desk.

David Ludlow

SUPPLIER www.currys.com
DETAILS www.belkin.com

BYTE SIZE

BELKIN Tunebase FM for iPod

★★★★★
£42 inc VAT

Belkin's Tunebase FM is a car-docking station for your iPod (4G or higher) that broadcasts music over FM to your car's radio. It plugs into your cigarette lighter, so your iPod is kept fully charged as you drive. Belkin bundles the kit with dock adaptors for all types of iPod. The Tunebase doesn't use Apple's Universal Dock, though, so future iPods may not fit easily.

Up and down buttons let you choose the FM frequency on which to broadcast, and you can save four presets. The Tunebase uses the iPod's screen to display FM settings. Sound quality is excellent, and the Tunebase is ideal for iPod owners, but it is expensive.

David Ludlow

SUPPLIER www.dabs.com
DETAILS www.belkin.com



SONNET Volta

★★★★★
£37 inc VAT

BEST BUY The Sonnet Volta is an external

battery that plugs into the dock connector of 5G iPods. A brace holds the iPod in place. You can get it to power 4G iPods, but depending on their capacity they are either too thick or too thin to fit properly, putting undue stress on the dock connector.

A 30GB 5G iPod lasted 21 hours and 33 minutes under our standard MP3 playback test. With the Volta it lasted an amazing 47 hours and 45 minutes, providing enough music for a round trip from London to Sydney.

The Volta weighs 112g and almost doubled the thickness of our iPod, but it ensures your iPod's battery won't run out when you need it most.

Alan Lu

SUPPLIER www.amazon.co.uk
DETAILS www.sonnettech.com



EVESHAM Voyager C720DC

★★★★★
£1,700 inc VAT

Playing the latest games on a notebook has always been expensive when compared to using a desktop PC. However, having all that computing power in a notebook can be useful. You can transport it to a friend's house to play games, and put it away in a cupboard when you've finished with it.

Evesham's Voyager C720DC has the latest graphics chipset, the Nvidia GeForce Go 7950 GTX. It was incredibly fast in our tests, scoring 127.9fps in our notebook Doom 3 benchmark. We tried running our desktop 3D graphics benchmark, Call of Duty 2, to give it a tougher test and it returned a smooth 45.6fps. We increased the resolution to match that of the display, for optimal graphical quality, and it still managed a playable 37.6fps. It's roughly equivalent to our current favourite desktop card, the ATI Radeon X1950 Pro.

The rest of the notebook's specification is just as impressive. It uses the fastest Intel Core 2 Duo processor available, the 2.33GHz Core 2 Duo T7600, and has 2GB of RAM. It stormed through our benchmarks, and will quickly complete any task.

We've seen this particular notebook chassis from a number of manufacturers before. Every time we see it we're surprised by how big and ugly it is, and the lightly textured silver plastic finish looks a bit cheap. It weighs a cumbersome 5.2kg, so you won't want to carry it for long, but the large size means it has all the ports you'll need, including four USB2 and a DVI video output.

Any complaints are blown away when the large 17in display comes to life. It's not the brightest screen we've seen, but it produces a good, clean white with even backlighting.



Colours look vibrant and contrast levels are impressive. With a high native resolution of 1,680x1,050 pixels, there's acres of desktop space in which to run complex applications or play games at high resolutions.

All that space is particularly welcome due to the installed Windows Vista Ultimate operating system, where the new sidebar takes up a good portion of your screen. The Ultimate edition has all the features of the Home Premium and Business editions in one. Media Center is included, and you can add a compatible USB TV tuner to make the notebook a fully featured PVR.

Windows Vista will run most DirectX games without problems. However, older titles are less likely to work properly. We had trouble getting our Doom 3 benchmark to run on Vista, and had to install Windows XP to get it working properly. Doom 3 uses OpenGL rather than DirectX, so you may experience problems with other OpenGL titles.

It isn't a new chassis, but Evesham has filled it with the best new hardware and operating system available. If you need a notebook that can do everything, this is it. It's just a shame it's so ugly.

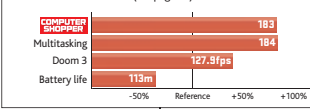
Seth Barton

SUMMARY

- ✓ Fast in 3D games and applications
- ✓ Windows Vista Ultimate
- ✗ Expensive; ugly

NOTEBOOK 2.33GHz Intel Core 2 Duo T7600, 2GB RAM, 100GB hard disk, Nvidia GeForce Go 7950 GTX graphics, DVD+/-RW +/-DL drive, 17in widescreen LCD, 5.2kg
PART CODE C720DC
SUPPLIER Evesham 08701 609500
DETAILS www.evesham.com

PERFORMANCE (see page 56)



Also consider...

SAMSUNG Q35 Red

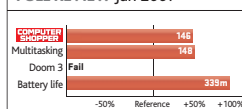
★★★★★ **PRICE CUT!**
£899 inc VAT

BEST BUY The Samsung Q35 has everything you need from an ultra-portable notebook. The widescreen display is very impressive with bright whites and accurate colours, while the keyboard is a good size and the touch pad is very accurate. It weighs just 1.9kg and feels robust enough to take a few knocks. All the ports you're likely to want are squeezed around the tiny chassis.

Inside, there's a DVD writer and a 100GB hard disk, providing plenty of storage for most needs. The Q35 has a fast dual-core processor and 1.25GB of RAM. Its integrated graphics chip uses 256MB of this, however, and the total can't be upgraded. It scored 146 overall in the *Shopper* application benchmarks.



NOTEBOOK 1.83GHz Intel Core 2 Duo T5600 processor, 1.25GB RAM, 100GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL, 12.1in widescreen LCD
SUPPLIER Micro Anvika 020 7467 6050 DETAILS www.samsung.com/uk PART CODE NP-Q35T008/SUK
✓ Excellent battery life; good Windows performance
✓ Good display and keyboard
FULL REVIEW Jan 2007



The battery lasted for an impressive five hours and 39 minutes in our light-usage test, so you'll be able to work for more than a morning or afternoon at a time. It's a great little notebook and would make an ideal travelling companion.

BYTE SIZE

DREAM CHEEKY USB Circus Cannon

★★★★

£24 inc VAT



Gadget manufacturers are fond of creating miniature projectile weapons controlled by a USB connection to your computer. Dream Cheeky's circus theme extends from the design of the cannon and projectiles through to the sound effects used by the firing program. Sadly, the software is poorly designed and clicking the onscreen controls doesn't seem responsive, so you're better off using the keyboard.

This is a great way to pester friends and colleagues. The small size of the projectiles means they should be kept away from small children and animals, but they're unlikely to do real damage. We just wish there was a spare supply of ammunition and a webcam for better targeting.

Alan Lu

SUPPLIER www.firebox.com
DETAILS www.dreamcheeky.com

SONY MDR-EX90LP

★★★

£45 inc VAT

Sony's MDR-EX90LP is a set of classy-looking earphones. The drivers have a closed back, so they block out a reasonable amount of external noise and let you enjoy your music at a quieter volume. Though they may not look comfortable, the drivers are easy to forget once you're wearing them. Sony supplies a compact case and a range of rubber sleeves to help you find the right fit.

There is a lot of well-defined bass, but the low-to-midrange response is slightly too powerful, making vocals a little quiet. Like some other closed earphones, the overall sound seems slightly confined. Our headphones round-up in *Labs, Shopper* March 2007 showed you needn't spend this much for good earphones.

Simon Handby

SUPPLIER www.play.com
DETAILS www.sony.co.uk



CHOOSING A... Notebook Computer

Follow the steps to find your ideal specs

PROCESSOR: 1.6GHz Intel Celeron M 420
MEMORY: 512MB DDR
HARD DISK: 60GB
STORAGE: DVD rewriter
GRAPHICS: Integrated (shares system memory)
SCREEN: 15.4in widescreen 1,280x800 LCD
EXTRAS: Wireless networking
CONNECTORS: Three USB2, memory card reader
SOFTWARE: Windows XP Home Edition
WEIGHT: 3kg
Recommended minimum in grey

1 The minimum specification of notebook we recommend, shown above in grey, is a good starting point when working out your ideal system. This is an average notebook that should cost around £600. It is not particularly powerful or, at 3kg, particularly portable.

2 Dual-core processors, such as Intel's Core Duo range, can be much faster at many tough tasks. This is dependent on software support, but a lot of applications have now been optimised. Dual-core processors are widely available and often cost only a little more than their single-core equivalents.

3 Most notebooks come with 15.4in 1,280x800 widescreen displays, which are great for watching DVDs or TV. If you want a notebook for use around the home, especially for entertainment purposes, it's worth considering one with a larger 17in display. This will also have a higher native resolution of at least 1,440x900, giving you a bigger desktop. This makes it far easier to use complex applications, such as photo- or video-editing software.

4 A modem, 10/100 Ethernet port and wireless 802.11b/g networking (WiFi) should be fitted as standard, but there are also some other ports and connectors that you might want. FireWire (IEEE 1394) is common and useful for digital video enthusiasts. Bluetooth is handy for connecting to a mobile phone, but it's usually fitted only to more expensive business notebooks. Memory card readers are pretty much standard, but check that your camera or MP3 player's format is supported.

5 If portability is your main priority, look for notebooks with 12.1in displays.

Spending around £1,000 will get you an ultra-portable notebook that weighs under 2kg. Most of these notebooks are just as powerful as their larger counterparts, though some use slower, ultra-low voltage (ULV) processors to further increase battery life.

6 Some ultra-portables can attach to an optional docking station, which incorporates drives, ports and power, when you get home to your desk. It's the best of both worlds, but tends to be expensive. Others have separate DVD drives to help keep size and weight to a minimum.

7 If you're not swayed by ultra-portable chic, you can get a lot more for your money. Entertainment notebooks pile on the features but still keep the price under £1,200. You should expect a 17in widescreen display, hybrid TV tuner, Windows XP Media Center Edition and a remote control.

8 There are features you can add to a notebook without increasing the weight or reducing battery life. A 120GB or 160GB hard disk will give you much more storage space, while 1GB of RAM will help you speed through bigger tasks. DVD rewriter drives are standard and will allow you to burn CDs and DVDs on your notebook.

9 Dedicated graphics let you play modern 3D games and are increasingly common on all but the cheapest or lightest notebooks. Look for ATI Radeon Mobility X1600 or Nvidia GeForce Go 7600 as a minimum for getting smooth frame rates on the latest titles. Many notebooks use integrated graphics, which are fine for all other purposes, but use up system memory.

10 Once you're happy with your specification, start to shortlist some models you can afford. Check the weight, display size and battery life of each of them. If these are not acceptable, you need to reconsider your priorities and which features you really need.

